A quantum of salience:
Reconsidering the role of extravagance in grammaticalization

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Abstract: Extravagance and salience have gained increasing attention in studies of language change, especially in Diachronic Construction Grammar. Nevertheless, the role of extravagance as a driving force in grammaticalisation remains debated. We first offer a theoretical discussion of the issue, along with possible explanations for why opinions on extravagance may differ and how some of the conflicting views may be reconciled. We then present a corpus-based case study on the role of extravagance in the development of German quantifier/degree-modifier constructions. In particular, we focus on relatively recent and innovative patterns like *ein Tick* 'a tick', *ein Fünkchen* 'a spark (diminutive)' and *eine Spur* 'a trace', which complement – and compete with – established constructions like *ein bisschen* 'a bit'. The fact that the younger constructions combine with a range of extravagant lexemes, and that they form relatively constrained semantic clusters in a densely populated grammatical domain, suggests that their emergence may be partially motivated by speakers' extravagant ambitions. Since extravagance may lead to the rise of new constructions even in the presence of near-synonyms, we also address the resulting tension among multiple constructions co-existing in a relation of both competition and mutual analogical support.

Keywords: Extravagance, grammaticalisation, quantifiers, degree modifiers, Diachronic Cognitive Linguistics

1   Introduction

The concepts of extravagance and salience have become increasingly popular in recent usage-based and constructionist approaches to language and language change (see e.g. Schmid & Günther 2016, Petré 2017, De Wit et al. 2020, Ungerer & Hartmann 2020). In particular, Haspelmath's (1999) proposal that extravagance plays a crucial role in grammaticalisation processes has been explored in more detail. Petré (2017) and De Wit et al. (2020), for example, argue that progressives in English, but also in Dutch and French, were used for extravagant purposes in the initial stages of their development. However, the exact role of extravagance in grammaticalisation processes is subject to debate and requires a nuanced discussion. This paper aims at contributing to this line of research by providing an overview of the theoretical state of the art and a case study of a constructional family whose members can at least partly be used in extravagant ways, namely

quantifier/degree-modifier constructions. In particular, we focus on a set of relatively new quantifier/degree-modifier constructions in German: *ein Tick* 'a tick', *ein Quäntchen* 'a quantum', *eine Handvoll* 'a handful', *ein Tacken/Zacken* 'a spike', *ein Hauch* 'a breeze/whiff', *eine Spur* 'a trace', *ein Fünkchen* 'a spark', and *eine Idee* 'an idea'. These constructions provide an interesting test case for investigating the role of extravagance in language change and grammaticalisation since they arguably emerged as creative and highly salient variations of the default quantifier/degree-modifier constructions in German, *ein wenig* 'a little' and *ein bisschen* 'a bit' (Neels & Hartmann 2018, 2022).

The remainder of this paper is structured as follows: In Section 2, we will give an overview of the theoretical concept of extravagance and its relation to salience. Section 3 discusses the role of extravagance in grammaticalisation. Section 4 is dedicated to our case study. Section 5 concludes the paper and discusses potential avenues for future research.

2   Extravagance and its relation to salience

The term *extravagance* was introduced by Haspelmath (1999) to describe one of Keller's (1994: 97) "maxims of action" that play a crucial role in Keller's account of language change: "Talk in such a way that you are noticed." Speakers' tendency to use "imaginative and vivid" language in order to present themselves as "little 'extravagant poets'" (Haspelmath 1999: 1057) has since been argued to underlie the development of new expressions in a number of linguistic domains. These include historical changes like French *ne ... pas*, which started out as an emphatic negation marker and then gradually lost its emphatic pragmatic force (Haspelmath 1999), the development of *BE going to* into an expression of future activity (Petré 2016), and the use of the English progressive in present-tense main clauses (Petré 2017). As such, the concept of extravagance is closely related to the notion of expressivity that had been evoked in the previous literature on grammaticalisation (see e.g. Hopper & Traugott 2003: 73). But "expressivity" is ambiguous as it can both refer to the capacity of a language to express a broad array of different meanings (as in Smith et al. 2013) and to more pragmatic aspects, such as the speaker conveying a certain stance towards the situation (Hopper & Traugott 2003: 73). In traditional grammaticalisation approaches that discuss expressivity as a key factor, the pragmatic prominence of a newly grammaticalising expression such as *ne ... pas* or *BE going to* is often seen as a side effect of the fact that the new expressions tend to be both phonologically and conceptually much richer than extant grammaticalised constructions. Haspelmath (1999: 1057), however, argues that speakers' (intentional) strive to be creative should be considered a major driving force in language change and grammaticalisation, and that therefore the term *extravagance* is more fitting than the term *expressiveness* or *expressivity*.

In their brief review of the literature on extravagance, Ungerer & Hartmann (2020) summarise five prototypical characteristics of extravagant expressions: they (i) stand out, emphasise the message content, and represent it in a vivid and imaginative way; (ii) deviate from linguistic norms

or expectations; (iii) signal the speaker's physical or emotional involvement in the message content;[1] (iv) refer to (speakers' perceptions of) non-canonical situations in the real world; and (v) are often redundant, i.e. contain more material than is strictly necessary. These dimensions bring together various definitions from the literature that emphasise different aspects of extravagance. While, for example, Haspelmath's original definition focuses more on the first aspect, Petré's (e.g. 2017) definition of extravagance puts the third aspect centre stage, viz. speakers' involvement. As Ungerer & Hartmann note, the five characteristics should not be understood as necessary criteria, but rather as prototypical features that apply in varying degrees to specific extravagant phenomena.

Essentially pragmatic in nature, the concept of extravagance is closely related to, and draws additional support from, the psycholinguistic notion of salience. Salience is a multifaceted concept in linguistics, psychology and neighbouring fields (see e.g. Giora 2003, Günther et al. 2016). While stimuli can be salient for a number of reasons, some of the resulting types of salience are more closely akin to extravagance than others. In particular, salience effects can arise either from the *non-familiarity* of the stimulus or from the *familiarity* of the stimulus (cf. Schmid & Günther 2016). As illustrated in the following, the concept of extravagance overlaps closely with the former type of salience effects but is distinct from the latter type.

Effects of *salience due to non-familiarity* can be observed in language as well as other cognitive domains (cf. Ellis 2017). For example, a stimulus can stand out because of certain physical properties. In human visual perception, this applies to prominent colours such as red and yellow, while linguistic expressions may be salient thanks to remarkable phonetic properties such as reduplication or onomatopoeia. Other items, such as neologisms, may be salient due to their overall novelty, which derives from low usage frequency (either in terms of absolute frequency or in relative comparison to other competing expressions). In addition, some stimuli are salient only in particular contexts in which they are unexpected, as captured by the psycholinguistic notion of surprisal (cf. Jaeger & Weatherholz 2016). Both these context-free and context-dependent effects of salience due to non-familiarity can give rise to instances of extravagant language. This suggests that extravagance as a pragmatic property is either attached to a given construction itself or that it emerges from the ways in which constructions are combined in context (cf. De Wit et al. 2020). That is, individual constructions having a non-canonical form or expressing a vivid concept possess high extravagant potential *per se*, which is evoked by, or even stored in, the form or meaning pole of their symbolic makeup. In other cases, extravagant deviations from linguistic norms or expectations, for example via unnecessary redundancy, are strongly cotext- and context-dependent.

On the other hand, some phenomena display effects of *salience due to familiarity*, which are less closely related, and in fact often opposed, to the notion of extravagance. For example, this

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[1] The aspect of speaker involvement in the message content is reminiscent of subjectification (e.g. Traugott 1995), a concept capturing a type of semantic change that is commonly found within grammaticalisation. The concepts of subjectification and extravagance can be kept distinct, however. Subjectification is a change towards meanings signalling speakers' modal stance towards the propositions they make. It is thus a process giving rise to "(inter)personal" expressions in the domain of (epistemic) modality. Extravagance, in contrast, is not a direction of semantic change but a pragmatic motivation and effect, essentially at the level of rhetorics.

type of salience may result from a form being the preferred, prototypical choice compared to other variants. Geeraerts (2016) refers to this as *onomasiological salience* and discusses the example of the lexical pair *trousers* and *pants*: while these can refer to the same piece of clothing, most speakers will treat one of the terms as their preferred variant. Clearly, this type of salience is positively correlated with frequency of use and is therefore likely to conflict with the above notion of salience by novelty (or surprisal).

Finally, some salience effects do not easily fall on either side of the familiarity/non-familiarity distinction. For example, a stimulus may be salient because it carries associations to which humans attribute particular importance or value. Linguistic examples of this type of salience include words pertaining to accomplishment, (in)dignity or sexuality. These expressions may be judged as extravagant or not, depending on their frequency of occurrence and other contextual factors. A similar case can be made for another type of salience found in sociolinguistics, where the notion of socio-cognitive salience describes speakers' awareness of the social indexicalities attached to a given linguistic variant (cf. Buchstaller 2016). While new expressions or meanings may become *socially salient* through their association with a particular group of speakers, this process requires that the new form has become sufficiently entrenched and thus familiar to members of the wider speech community. It is therefore not clear whether this type of salience contributes to the extravagance of linguistic expressions (cf. also Traugott 2017, who keeps the two phenomena apart).

As the above discussion illustrates, the concept of linguistic extravagance receives a firmer psychological grounding by relating it to a specific subtype of salience, which we have summarised under the label of salience due to non-familiarity. This also helps avoid some of the terminological ambiguities that are common in the literature on language change when the role of salience is discussed without clearly differentiating between its components. Based on these clarifications, we can now proceed to outlining the ongoing debate about the role of extravagance in grammaticalisation.

3   The role of extravagance in grammaticalisation: five steps towards reconciling the debate

Many approaches see grammaticalisation and salience as closely connected, but disagreement remains about what exact role salience by non-familiarity – and, by extension, extravagance – plays at different stages of the process. As we will discuss below, the particular controversy that we are interested in here concerns the role of salience and extravagance *at the onset* of grammaticalisation processes. This debate can be separated from a point that most approaches to grammaticalisation agree on, namely that the further development of grammaticalising expressions proceeds along a cline from lexical to grammatical that involves decreasing salience. This tendency plays a role both in language learning and processing and in language change. Ellis (2017) unites both perspectives:

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> At the start of a Linguistic Cycle, highly salient, new constructions enter a language. They are psychophysically intense. They are full of meaning. They are unique in their interpretation. Their novelty charms and surprises.
> At the end of a cycle, grammatical constructions exit: by dint of frequency, they have shortened and become psychophysically slight; by dint of shortening, they have become homophonous with low contingency between form and function; by dint of habitual overuse, they have become semantically bleached. (Ellis 2017: 92)

Fulfilling abstract procedural (i.e. non-referential, largely language-internal) functions, grammatical constructions are low-level significative units and usually coded accordingly. Grammaticalisation, as Harder & Boye (2011: 63) put it, "gives rise to linguistic expressions which are coded as discursively secondary", i.e. that encode "backgrounded" information. Through cognitive automation and socio-communicative ritualisation (cf. Lehmann 2017, Haiman 1994), grammaticalisation creates efficient solutions for conveying meanings that speakers frequently wish to communicate alongside more contentful, referential elements. Prototypically, only the latter, lexical, elements are coded in ways that allow speakers to give them primary discourse prominence relative to the co-text, i.e. to make them the focus of the discourse. Note that whenever a meaning potentially realised by a grammatical marker is discursively primary, speakers tend to opt for a semantically and formally richer realisation; for example, a low-salience plural suffix may be enriched by lexical expressions such as *several* or *a number of*. On their path to ever more bleached and reduced forms (incl. lack of stress), grammaticalising constructions become less and less likely to exhibit salience as a part of an utterance.

While it is thus fairly clear that, beyond its incipient stages, grammaticalisation involves decreasing salience, the role of extravagance for the onset of grammaticalisation is being disputed. Some researchers hold that extravagance drives (or at least assists) primary grammaticalisation, but there are also arguments suggesting that high salience impedes grammaticalisation processes.

According to Haspelmath's (1999) extravagance approach, having available fresh high-salience means of expression is a key motivation for innovating periphrastic constructions (see also Haspelmath 2000). He suggests that many cases of primary grammaticalisation arise from speakers' desire to use innovative, vivid expressions. Since grammatical elements are usually not available for conscious manipulation due to their high degree of executive automaticity, speakers construct novel lexical combinations to satisfy their drive for linguistic creativity (cf. the concept of *Formungstrieb* by Gabelentz 2016 [1891]: 380–384). For example, Haspelmath argues that *by means of* emerged through speakers' attempts to find a lexically richer, innovative alternative to the preposition *with*.[2] If such extravagant lexical expressions gain some currency and happen to stand in for concepts that are frequently needed in communication, as found in most categories of grammar like negation, tense, modality etc., the new periphrastic constructions may enter a

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[2] However, as a reviewer correctly points out, it can be debated whether *by means of* can be considered a (clear) case of extravagance without broadening the concept too much. If we follow Haspelmath in regarding "extravagance" simply as a label for Keller's maxim "Take in such a way that you are noticed", we would argue that the longer, more contentful form probably serves this function – but it does so in a very different way than, for instance, some of the quantifier/degree-modifier constructions discussed in the case study presented below.

frequency-sensitive cycle of more profound grammaticalisation processes. As far as the onset of primary grammaticalisation is concerned, however, Haspelmath's model predicts that it is extravagance that sets this process in motion.

Traugott (2017), in contrast, argues that at the onset of the grammaticalisation cycle there are non-extravagant expressions. In her account, early grammaticalising constructions emerge due to the indeterminacy of meaning and structure inherent in discourse, specifically in low-salience contexts. Discursive ambiguities produce various structural variants from the flow of unremarkable constructs (cf. Croft 2010), and some of these variants can undergo constructionalisation and subsequent grammaticalisation. One of Traugott's examples is the development of the *BE going to* future: in her view, the new 'future' meaning emerged from a gradual reinterpretation of the earlier 'motion with a purpose' meaning (see below for further discussion). Traugott stresses that the enabling factor in changes like these is low salience: "There is nothing exceptional, extravagant or sumptuous about the onset of grammaticalisation. Changes at onset are low in pragmatic, cognitive and social salience." (p. 102). At first glance, this view appears to be the direct opposite of Haspelmath's extravagance account.

After this brief outline of the debate, we now turn towards an attempt to reconcile, at least in part, the opposing views about the role of extravagance in grammaticalisation. Specifically, we explore reasons for *why* grammaticalisation researchers arrive at such conflicting views, and whether a clearer understanding of the areas in which there is disagreement can provide a first step towards reconciling seemingly incompatible interpretations. In the following, we address five such aspects, arguing in each case that some of the disagreement among scholars can be resolved by taking a closer look at how individual instances of grammaticalisation differ, where the potential effects of extravagance may be located, and how these effects can be identified. The five aspects we consider are: (i) the variability among cases of grammaticalisation depending on the targeted functional domain, (ii) the fuzzy boundary between grammaticalisation and lexicalisation, (iii) the difference between actuation and diffusion, (iv) the roles of hearers versus speakers, and (v) the corpus-linguistic operationalisabilty of extravagance.

Concerning the first factor, some of the controversy may derive from the fact that cases of grammaticalisation differ, and that extravagance may play a role in some of them but not in others. Although there may be a greater tendency for change to go unnoticed in morphosyntax compared to lexis, our present, limited knowledge on the sociopragmatics of grammaticalisation does not warrant the conclusion that all types or stages of grammaticalisation operate below the level of conscious awareness. Arguably, the conditions for the emergence of a new sentence negator or a new degree modifier differ greatly from those for the development of a tense marker, for instance. The former two grammaticalisation scenarios involve high rates of renewal; consider Jespersen's cycle of negation (Jespersen 1917; Kiparsky & Condoravdi 2006) or the emergence of new quantifiers and intensifying degree modifiers such as *heaps of* and *hella* (cf. Trousdale 2012). The chief reason for this trend seems to be pragmatic in nature. Emphatic, intensifying expressions "wear off"; there is an inflationary effect of rhetorical devaluation (Dahl 2001), which boosts a

key process in grammaticalisation, namely semantico-pragmatic bleaching. Some communicative tasks or domains are rhetorically more competitive than others in terms of how often speakers wish to make their point with some sort of emphasis or vividness. For example, contradicting someone is rhetorically more competitive in this sense than locating events in time. This might well be what causes the grammaticalisation spiral to move faster for negators than for tense markers. For the same reason, competitive domains such as negation, quantification and degree intensification may be more likely to lead to cases of grammaticalisation that start out with salient, extravagant source constructions.

As for the second aspect, cases of grammaticalisation and lexicalisation are sometimes hard to distinguish, not least because some domains of grammar grade into what is traditionally considered part of the lexicon. Such borderline cases, too, contribute to conflicting views about the role of extravagance, considering that for lexical coinages it is not unusual to be extravagant (e.g. *whodunit*, *red herring*). Since its earliest days, the grammaticalisation literature has featured examples that could equally, or should preferably, be classified as instances of lexicalisation; Meillet (1912), for instance, included the example of Old High German *hiu tagu* '(on) this day' turning into the Modern German adverb *heute* 'today'. Besides adverbs, the emergence of prepositions (e.g. *in light of*) and derivational morphemes (e.g. *-ship* < Germanic root **skap-* 'to create') could be listed as other cases typically leading to divergent analyses in the literature on grammaticalisation and lexicalisation. Recent construction grammar approaches have reconceptualised this problematic pair of processes, establishing clearer determinants of each type of change, most notably the parameters of schematicity and productivity (esp. Traugott & Trousdale 2013). However, even then, the dividing lines between grammaticalisation and lexicalisation are not clear-cut. Some constructions exhibit medium degrees of schematicity and productivity; for example [*not the* A-*est* N_1 *in the* N_2] 'not very clever', as in *not the sharpest tool in the shed*, or the construction [*because* X], as in *because reasons*. Moreover, whether an emergent construction will go down the path of prototypical lexicalisation or grammaticalisation is not predetermined by the first steps of construction formation and change, since lexicalisation and grammaticalisation are not opposite but "orthogonal" (Himmelmann 2004) processes sharing a number of subprocesses (see Brinton & Traugott 2005: 110).

Thirdly, scrutinising the debated role of extravagance at the onset of grammaticalisation may furthermore require a specification of the concept of "onset". Each increment of innovation in gradual language change involves a dimension of actuation and one of diffusion/propagation. Actuation is typically driven by cognitive or pragmatic factors (see e.g. De Smet 2012), successful diffusion primarily by social factors (cf. Croft 2000; Weinreich et al. 1968). Accordingly, if salience is involved, subtypes of salience will differ depending on the dimension. Cognitively oriented manifestations of salience, such as surprisal, are more relevant to actuation, whereas socially oriented manifestations, such as social indexicalities (e.g. "young", "liberal") attached to a construction, are more relevant to diffusion. Differences in where researchers draw the boundary

between actuation and diffusion as well as between different types of salience can lead to conflicting conclusions.

As a fourth point, it might be necessary to unpack the onset of grammaticalisation also in terms of speaker versus hearer roles. While some mechanisms proposed in the grammaticalisation literature, such as analogy, metaphor and metonymy, can take effect in both production and comprehension, others are either production-centred or comprehension-centred. Explanatory concepts like context-induced reinterpretation (Heine et al. 1991) and reanalysis (e.g. Detges & Waltereit 2002), for instance, operate during comprehension, thus ascribing the fist step of actuation to the hearer. Other concepts, such as invited inferencing (e.g. Traugott & Dasher 2002), suggest that speakers make the first step. Like these mechanisms of innovation, levels of extravagance as a potential motivation for innovation can be assumed to differ in hearers and speakers. This aspect surfaces in Traugott's discussion on (non-)salience in grammaticalisation as well:

> Salience may [...] be higher for the speaker than for the addressee because the speaker intends a certain direction for the discourse and may actively choose to say something novel in the discourse situation, whereas the addressee interprets it in reference to what has already been said in the discourse situation. (Traugott 2017: 95f.)

It is of course also conceivable that a novel structure is born in a hearer in an unremarkable, low-salience critical context (Diewald 2002), as the hearer is filling semantico-pragmatic indeterminacies with their own interpretation. When the same language user takes over this novel structure or meaning into an act of production, will they be aware of the non-conventionality of this novel use? An affirmative answer should not be excluded, particularly at the onset of primary grammaticalisation, when constructions are semantically not yet highly bleached, their usage frequencies typically not yet very high, and their execution thus not yet highly automated. Possibly, novel structures in primary grammaticalisation could hardly gain enough currency for successful diffusion (esp. in light of existing near-synonymous alternatives) if the structure was not salient for at least some speakers, who deliberately choose a given construction for its extravagant freshness.

A final aspect contributing to disagreement about the role of extravagance in grammaticalisation concerns the extent to which researchers assume that extravagance can be operationalised, and potentially quantified, in historical corpus data. This is illustrated by a comparison of Traugott (2017) and Petré (2016), who both examine the grammaticalisation of *BE going to* as a future marker (mentioned above), but draw very different conclusions about the role of extravagance in promoting this change. The different outcomes of their analyses seem to stem, at least in part, from their diverging views on what methods are suitable for evaluating the extravagant potential of the construction.

Traugott (2017) expresses doubt that extravagance can be directly "measured" in diachronic data, due to the "impossibility of gaining direct access to speakers of earlier times" (p. 96). In particular, she notes that past speakers' *perceptions* of salient phenomena appear inaccessible to

data-driven inquiry. As a result, Traugott resorts to a qualitative analysis of selected examples in her discussion of *BE going to*. From this analysis, she concludes that there is "no evidence" that early adopters of the prospective future meaning "intended to be noticeable or innovative" (p. 103).

Petré (2016) also concedes the difficulty of quantifying extravagance, as "something which seems to be the epitome of the qualitative expression" (p. 125). Nevertheless, he proposes an indirect strategy for identifying extravagant expressions in corpora via their contextual properties. Key to this approach is the assumption that speakers use extravagant language in contexts in which they are emotionally more strongly involved (see Section 2, where this was discussed as one characteristic of extravagant expressions). Following this logic, Petré compares *BE going to* with its competitor *GO to* during the critical grammaticalisation period in the early 17th century. He finds that the former construction occurred more frequently with contextual markers that express immediate activity, such as adverbs of current time (e.g. *now*), and less frequently in contexts that typically lack emotional involvement (e.g. stage directions). Petré interprets this use of *BE going to* when highlighting the immediacy of the intended action as evidence of its extravagant nature. Moreover, he suggests that the construction underwent a second cycle of extravagant extension during the 17th century, occurring increasingly in non-motion contexts and thus leading to a salient contrast with its original motion sense. Interestingly, however, Traugott (2017) uses the same piece of evidence to argue against the extravagance of *BE going to*, since in her view the non-motion future meaning falls out naturally from the earlier 'motion with a purpose' sense.

As the above example shows, operationalising extravagance remains a challenging enterprise. Views differ about whether the concept is best assessed via a qualitative analysis guided by the researcher's intuition, or via a quantitative investigation that draws on indirect contextual measures. Each of these approaches comes with its own benefits and limitations. For example, Petré's (2016) quantitative analysis may uncover contextual regularities in the development of *BE going to* that are not amenable to a qualitative assessment. On the other hand, his choice of contextual markers deserves critical scrutiny: for instance, one might question whether the notion of 'immediate action', as expressed by adverbials of current time, is *per se* emphatic, and to what extent the (stylistically) extravagant nature of *BE going to* can be separated from its core semantics of 'near future'. Moreover, the above discussion shows that the contextual measures are to a large extent construction-specific, which means that different criteria may need to be devised when investigating other construction types.

Given the remaining challenges for the above attempts to identify extravagant expressions, it is worth considering alternative quantitative or qualitative methods. In Section 4, we pursue a different corpus-based approach to explore the role of extravagance in a specific case of grammaticalisation. Specifically, we focus on a set of relatively recent (and potentially still ongoing) changes: the emergence of innovative quantifier/degree-modifier constructions in German. The rationale behind this is that given the recency of the phenomenon, we may be able to combine corpus-based techniques that shed light on the semantic profiles of these constructions with our native speaker intuition in order to evaluate the extravagant nature of the changes. Our

case study will be informative about three of the five issues discussed in this section: first, we investigate whether the grammatical domain of quantification and degree modification may be particularly prone to triggering extravagant change; second, we examine a phenomenon that lies at an intermediate point between grammaticalisation and lexicalisation; and finally, our corpus study contributes to the ongoing debate about how extravagance can be identified and operationalised. We will leave the other two aspects addressed in this section – actuation versus diffusion and hearer versus speaker roles – to future empirical studies, as corpus-linguistic approaches alone are unlikely to provide conclusive answers to these issues.

4 Case study: Extravagant newcomers in a family of quantifier/degree-modifier constructions

In this section, we aim to explore extravagant potentials in early grammaticalisation in a corpus-based fashion. Unlike Petré (2016), Traugott (2017) and Haspelmath (1999), however, we not only study individual grammaticalising expressions with their collocational profiles, but we also examine their network relations to other expressions which together form a large family of constructions with varying degrees of grammaticalisation. Our test case is a family of German periphrastic expressions serving as small-size quantifiers and downtoning degree modifiers. Following up on previous diachronic work by Neels & Hartmann (2018, 2022), we now focus on relatively recent additions to this constructional family. The most frequent quantifier/degree-modifier constructions in German, *ein bisschen* 'a bit' and *ein wenig* 'a little', have been complemented with more innovative patterns like *ein Tick* 'a tick', *eine Handvoll* 'a handful', or *ein Fünkchen* 'a spark' over the course of the last few hundred years.[3]

Our key question is what motivates the continued emergence of these new constructions within a "layered" (Hopper 1991) grammatical domain that is already rich in near-synonymous patterns and could therefore be thought of as "saturated". We suggest that extravagance forms one of these motivating factors. The use of new quantifier/degree-modifier constructions may not only be guided by functional need alone, i.e. speakers' desire to encode previously inexpressible meanings (in line with Traugott's [2017] view), but it may also be partially motivated by speakers' attempts to stand out and express already familiar meanings in novel creative ways.

Previous work that has hinted at the role of extravagance in the grammaticalisation of quantifier/degree-modifier constructions focused on *ein bisschen* 'a bit', which is likely to have

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[3] To confirm that these low-frequency quantifier/degree modifier constructions are relatively recent developments, we checked their frequencies in the Reference and Newspaper Corpora of the Digital Dictionary of the German Language (DWDS), a collection of historical and contemporary corpora covering the time span from c. 1500 to 2018. The results for *eine Idee* 'an idea', *ein Tick* 'a tick', and *ein Quäntchen* 'a quantum' are also discussed in more detail in Neels & Hartmann (2022). Overall, the corpus data suggest that all nine constructions under discussion are infrequent in the historical data and have only seen a significant rise in frequency during the second half of the 20th century (with the newest constructions, *ein Zacken* and *ein Tacken*, only being attested from the 1980s and 2000s onwards). Based on these facts, we take our data to represent the early stages of grammaticalisation, even though we agree with a reviewer that it remains debatable whether they reflect the exact onset or a slightly later stage during the development of some of our constructions.

emerged as a salient alternative to the older *ein wenig* 'a little'. As discussed in Neels & Hartmann (2018), *ein bisschen* developed along a grammaticalisation path that shows striking similarities to the development of English *a bit*, as sketched, for example, by Traugott (2008). It first combined with concrete nouns, as can be expected given its original literal meaning 'bite (diminutive)', but then extended to abstract nouns as well as adjectives and verbs. It can reasonably be assumed that the use of *bisschen*, just like the use of English *bit*, in combination with non-food items was perceived as extravagant in the early stages of its development.

We expect that similar pragmatic mechanisms are involved in the development of the more recent quantifier/degree-modifier constructions discussed here. In particular, we investigate three predictions about how the extravagance of these constructions could manifest itself in the corpus data. First, in line with previous definitions of extravagant language (see Section 2), we expect the newer quantifier/degree-modifier constructions to collocate relatively frequently with lexical items that either display vivid and emotionally loaded semantics, thus signalling the speaker's emotional involvement, or which are stylistically unusual, for example by instantiating marked registers (e.g. formal, colloquial), innovative morphological patterns (e.g. multiple compounding) or striking phonology (e.g. onomatopoeia). Second, we hypothesise that the younger quantifier/degree-modifier patterns should have more narrow semantic profiles compared to the prototype *ein bisschen* 'a bit'. They may not grammaticalise much beyond their initial semantic niche if one central purpose of their existence is to be used on pragmatically special occasions. With their less abstract, richer semantics, they lend themselves to a more vivid style of expression. Third, we expect the semantic profiles of the newer quantifier/degree-modifier constructions to partially overlap with each other, in line with the claim that they emerge from speakers' extravagant ambitions rather than (or in addition to) the need to fill distinct functional gaps. That is, speakers' creative use of the extravagant patterns may give rise to a somewhat redundant network of constructions that cluster around similar functional niches.

In the next sections, we investigate these predictions in a largely exploratory fashion, using a combination of quantitative and qualitative corpus methods.

4.1 Data and methods

Present-day German features dozens of small-scale quantifier/degree-modifier constructions. Apart from the by now highly grammaticalised *ein bisschen* (e.g. *ein bisschen Glück* 'a bit of luck'), we analyse nine representative "newcomers": *ein Fünkchen* 'a spark (diminutive)', *ein Hauch* 'a breeze', *eine Handvoll* 'a handful', *eine Idee* 'an idea', *ein Quäntchen* 'a quantum (diminutive)', *eine Spur* 'a trace', *ein Tacken* 'a spike (lower German)', *ein Zacken* 'a spike (high German)', and *ein Tick* 'a tick'. The data were drawn from DECOW16AX (Schäfer & Bildhauer 2012, Schäfer 2015), a webcorpus comprising c. 20 billion tokens. The large size of the corpus, together with the fact that its composition reflects both standard and non-standard language use (the data are derived from sources as different as online newspapers and discussion forums on all

kinds of different topics), makes it ideal for investigating the role of creativity and extravagance among low-frequency phenomena.

The individual constructions investigated in the present study are exemplified in (1).

(1)   *a.*   Schade, ein Fünkchen Hoffnung war ja doch. 'Pity, there had been a spark of hope after all.' (www.behinderte-hunde-forum.de)

　　　b.   Eine Handvoll Manager und ihre politischen Berater verdienen Unsummen 'A handful of managers and their political advisors earn huge sums.' (www.predigtpreis.de)

　　　c   Ein vollreifer, intensiver Spanier mit betörenden Aromen von dunklen Beeren und einem Hauch Schokolade. 'A fully ripe, intense spaniard [i.e. Spanish wine] with beguiling aromas and dark berries and a breeze of chocolate.' (www.parfuemerie-thiemann.de de)

　　　d.   Dennoch war Johns Geschichte in meinem Augen eine Idee besser 'Still, John's story was an idea better in my view.' (www.halobase.de)

　　　e.   Zu guter letzt fehlte dann auch noch ein Quäntchen Glück. 'In the end, what was missing was a quantum of good luck.' (www.msvportal.de)

　　　f.   Die Leser werden immer weniger, denn sie gehen zum Zeitungslesen ins Internet. Dort ist es bequem, gratis und immer um eine Spur aktueller als in der herkömmlichen Tageszeitung. 'The readers become fewer and fewer, as they go on the internet to read newspapers. There it is comfortable, free and always a trace more up-to-date than the conventional daily newspaper.' (www.der-lifestyle.de)

　　　g.   Liest du sonst auch 11 Freunde? Das Sonderheft ist noch mal einen Zacken geiler! 'Do you generally read '11 Freunde'? The special issue is even a spike more awesome!' (www.hsv-forum.de)

　　　h.   Angeschlossen über eine Heimkino-Anlage kommt James Bond: Golden Eye 007 noch einen Tacken besser rüber 'Connected to a home cinema system, 'James Bond: Golden Eye 007' gets across a spike better.' (www.gameradio.de)

　　　i.   Alle Teams, die bisher schon Regionalliga gespielt haben, bleiben entweder gleich stark oder werden nochmal einen Tick stärker sein. 'All teams that have played in the regional league so far either remain equally strong or will be a tick stronger still.' (forum.tt-news.de)

These quantifier/degree-modifier constructions share a (prototypical) structural template: [*ein* N(-*chen*) 'small unit' X], i.e. the indefinite article *ein*, a noun denoting a small unit such as *Biss* 'bite' or *Funken* 'spark', which is optionally combined with the diminutive suffix *-chen*, and a productive slot. If nouns enter this slot, the respective construction serves as a quantifier (or partitive), whereas adjectives, verbs and other parts of speech are associated with degree-modifier uses. As shown in Table 1, *ein bisschen* occurs roughly equally with nouns and adjectives, while the newer constructions typically lean towards one lexical class. *Eine Handvoll* occurs exclusively with nouns; *ein Fünkchen*, *ein Hauch* and *ein Quäntchen* preferentially combine with nouns but also occur with adjectives; and *eine Idee*, *eine Spur*, *ein Tacken*, *ein Zacken* and *ein Tick* prefer adjectival items, especially in the comparative.

Tab. 1: nouns, adjectives, and other parts-of-speech in the quantifier/degree-modifier constructions. The numbers in parentheses in the ADJ column indicate how many instances occur in the comparative form (e.g. *einen Tick besser* 'a tick better') or in the excessive form (e.g. *eine Idee zu viel* 'an idea too much'). The numbers given here are based on the automatic POS annotation available in the corpus data. Note that *ein bisschen* also occurs with verbs; for the present study, however, we focus on adjectives and nouns as modified items, hence we only queried for *ein bisschen* + adjective or noun.

Construction	N	ADJ (comparative / excessive)	Other	Sum
bisschen	258718	290204	–	549022
Füncken	2713	156 (76/5)	3	2872
Handvoll	35998	0 (0/0)	0	35998
Idee	72	1106 (814/272)	0	1178
Hauch	11274	5772 (3486/707)	179	17225
Quäntchen	2707	625 (442/68)	39	3371
Spur	3067	14512 (7015/6868)	0	17579
Tacken	30	1042 (853/241)	50	1122
Zacken	40	977 (893/138)	70	1087
Tick	535	22095 (17027/5905)	984	23614

To address our three hypotheses about the extravagance of the younger quantifier/degree-modifier constructions (see above), we combine the well-established method of collostructional analysis, in particular simple collexeme analysis (Stefanowitsch & Gries 2003), with a fairly simple but potentially innovative network analysis. In the simple collexeme analysis, we compute association/dissociation measures for all lexical items that occur in the open slots of our

constructions, by comparing their frequency in the construction with their total frequency in the corpus. We use the log-likelihood ratio G^2 as the association measure; the *p*-value of the association is referred to as the collexeme strength. Collostructional analysis can be used to gauge the semantic "territory" a construction covers: for example, Stefanowitsch & Gries (2003) investigate the pattern [N *waiting to happen*], as in *there's an accident waiting to happen*, and show that this construction preferentially combines with nouns with a negative semantic prosody. In our case, we examine the collexemes of our individual constructions in a qualitative fashion to identify whether the younger quantifier/degree-modifier constructions, compared with the "baseline" prototype *ein bisschen*, tend to attract semantically or formally extravagant lexemes (hypothesis 1), and whether they occupy relatively constrained functional niches, displaying only limited productivity in certain semantic domains (hypothesis 2). For the computational implementation of the method, we use Flach's (2021) package *collostructions*. For reasons of space, the collexeme lists are not displayed here – instead, the full lists can be found in the online supplementary material available at https://hartmast.github.io/degreemodifiers/.[4]

We then move beyond considering our ten quantifier/degree-modifier constructions in isolation, and combine them in a network to examine their degree of functional overlap (or difference). For this purpose, we construct a network containing the top 100 collexemes of each construction, shown in Figure 1 in Section 4.2. Each node stands for one type, while the links connect each collexeme type to all quantifier/degree-modifier constructions it is attested with. We limit the analysis to the top 100 collexemes of each construction to keep the visualisation more readable. For the same reason, Figure 1 does not include the labels for the collexemes, but instead highlights simply how many collexemes the constructions share with each other, and how many of their top 100 collexemes are unique to the construction (for a more detailed graph containing the collexeme labels, see https://hartmast.github.io/degreemodifiers/). By combining the visual impression of the diagram with exact counts of how many collexemes are shared by each pair of constructions, we will test our third hypothesis, namely that the younger quantifier/degree-modifier constructions cluster in overlapping functional niches while the prototype *ein bisschen* is more evenly linked to the overall constructional network.

Before we turn to the results, note that the present datasets have a number of limitations. While we manually deleted unambiguous false hits from the data for the less frequent quantifier/degree-modifier constructions (but not for *ein bisschen*), we extracted the lemmas of the modified items automatically by using the lemma annotation of the word tagged as noun or adjective immediately following the quantifier/degree modifier in question. This may lead to an overestimation of adjectives when the modified item consists of an adjective-containing noun phrases: for example, *menschlich* 'human' would be falsely identified as the modificandum in *Wo ist da auch nur eine*

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[4] It should be noted that collostructional analysis almost necessarily entails a certain amount of noise: For instance, we have manually corrected the lemmas of the modified items in the concordances we worked with. This was of course not possible for the entire multi-billion-word corpus, from which the total corpus frequencies of each lemma is drawn. Thus, a few lemmas are attested in our dataset but not in the full corpus. As this only affects a very small proportion of items, they were discarded from the present analysis. This explains why the total frequencies of each quantifier/degree-modifier construction in the collostructional analysis partly differ from those mentioned elsewhere in the paper or the supplementary material.

Spur menschlicher Liebe? 'Where is there just a trace of human love?'. In addition, some results may be skewed because frequently cited proper names are present in the data, e.g. the film title *Für eine Handvoll Dollar* (German title of "A fistful of dollars"). For a more in-depth analysis in future studies, the lemmatisation should therefore be corrected manually.

4.2 Results

We will now discuss the results of the collexeme analysis and the network analysis in more detail, focusing on their implications for the role of extravagance in the use of the quantifier/degree-modifier constructions. Following the three predictions outlined at the beginning of Section 4, we will first examine the slot fillers of the constructions (Section 4.2.1 and 4.2.2), before turning to the network relations within the constructional family (Section 4.2.3).

4.2.1 Extravagant collexemes

The results of the simple collexeme analysis (see the link to the online collexeme lists in Section 4.1) suggest that the younger quantifier/degree-modifier constructions combine with a substantial number of extravagant collexemes. Among the top 100 collexemes of *ein Hauch* 'a breeze', for example, are a range of nouns that imply either a strong degree of emotionality, such as *Tragik* 'tragedy' (rank 79) and *Dramatik* 'dramatics' (95), or that encode other concepts "beyond the ordinary", such as *Glamour* 'glamour' (rank 15), *Exklusivität* 'exclusivity' (20), *Noblesse* 'nobleness' (67) and the noun *Extravaganz* ('extravagance') itself (12). *Noblesse*, for instance, is "exclusive" not only at a conceptual level, but as a French borrowing it is also part of a more elevated register, as is the collexeme *Frivolität* 'frivolity' (44). Moreover, the noun *Exotik* 'exoticism' is the second most strongly attracted collexeme of *ein Hauch*, and the corresponding adjective *exotisch* also belongs to its top collexemes (57). Another unusual adjectival collexeme of *ein Hauch* is the compound *retro-modern* (94).

Similar examples of extravagant collexemes can also be found for the other younger quantifier/degree-modifier constructions. Many of these collexemes fall into the category of evaluative colloquial lexis, such as *geil* 'awesome' (rank 80 for *ein Tacken*, 86 for *ein Tick*), *abgedreht* 'weird' (rank 94 for *ein Tick*), *beschissen* 'shitty' (rank 59 for *ein Zacken*, 86 *for Quäntchen*) and *Hirnschmalz* 'brainpower, lit. brain goo' (rank 87 for *ein Quäntchen*). Others represent the opposite end of the spectrum, instantiating refined concepts and registers, such as *ausgefeilt* 'elaborate' (rank 73 for *ein Tick*), *schillernd* 'iridescent' (rank 44 for *eine Idee*), *salbungsvoll* 'unctuous' (rank 75 for *eine Idee*), *theatralisch* 'theatrical' (rank 22 for *eine Spur*) and *hymnisch* 'hymn-like' (rank 72 for *ein Zacken*). In some instances, the extravagant qualities of the collexemes are additionally enhanced by their morphological complexity (which in turn often expresses semantic richness), as in (*ein Tacken*) *superwissenschaftlich* 'super-scientific', (*ein*

Quäntchen) *Extra-Dramaturgie* 'extra-dramaturgy', *(ein Quäntchen) tragisch-schelmenhaft* 'tragic-prankster-like' and *(ein Fünkchen) Gutfilm* 'goody-goody film'.

Moreover, several of the quantifier/degree-modifier constructions are sometimes combined in the same sentence, suggesting that speakers use them to signal their emotional involvement in multiple creative ways. Consider Example (2), which features *ein Hauch* 'a breeze' alongside *eine Spur* 'a trace' and *eine Idee* 'an idea'.

(2) Ein visuelles Wortspiel, bei dem andersfarbige Buchstaben das Wort "Art" bilden, das ist noch **eine Spur** bemühter, **eine Idee** volkshochschulkreativer, mithin **einen Hauch** bescheuerter (DECOW)
'a visual play on words, in which differently coloured letters form the word *art*; that's even a bit (lit. trace) more stilted, a bit more (lit. idea) community-college-creative, hence a bit (lit. breeze) more stupid'

The most extravagant expression in this example is certainly *eine Idee volkshochschulkreativer* 'an idea more community-college-creative' because of the collexeme's nature as an uncommon, highly complex compound. It is uttered in a derogative context, and so are the other two quantifiers/degree modifiers. Their collexemes, *bemühter* 'more stilted' and *bescheuerter* 'more stupid, daft', are instances of evaluative, emotional language.

Naturally, the results of this qualitative analysis illustrate only trends among the younger quantifier/degree-modifier constructions, and not a sharp dividing line that separates them completely from the older prototype *ein bisschen*. Among the top 100 collexemes of *ein bisschen*, there are at least two items that could be regarded as extravagant: *Bammel* (rank 45) and *Schiss* (81), both meaning 'jitters'. Admittedly, not all of the younger constructions are richer in extravagant collexemes; for example, none of the top 100 collexemes of *eine Handvoll* stand out in this regard. Still, the overall data suggest that in expressive, emotionally loaded contexts like the usage event exemplified in (2) above, language users are more likely to select from the younger, infrequent members of the quantifier/degree-modifier family than from the default modifiers, such as *ein bisschen*.

4.2.2 Constrained functional profiles

A second purpose of our collexeme analysis is to identify whether the younger quantifier/degree-modifier constructions are restricted to more narrow semantic niches compared with the highly grammaticalised prototype *ein bisschen*. For the latter, the top 100 collexemes of *ein bisschen* illustrate that the construction covers diverse semantic fields and that it combines at roughly equal frequency with nouns and adjectives (see also Section 4.1), thus displaying the behaviour of a prototypical grammatical marker. None of its top 100 collexemes refer to edible substances, suggesting that present-day speakers retain virtually no associations between the grammaticalised

construction and its lexical source *Bisschen* 'little bite' (as also reflected orthographically by the lower-case form *ein bisschen*).

In contrast to *ein bisschen*, the newer quantifier/degree-modifier constructions display much more specific preferences with respect to the semantics of their collexemes. Some of these semantic constraints appear to be related to the lexical source of the grammaticalising constructions. For example, *ein Hauch*, besides combining with a few abstract concepts, attracts a number of concrete olfactory and gustatory nouns, such as *Vanille* 'vanilla' (rank 1), *Zimt* 'cinnamon' (8) and *Knoblauch* 'garlic' (10). This preference seems connected to the original meaning of *Hauch* as 'breeze', given that the collexemes denote flavours that can be literally transported by a puff of air. Similarly, the top collexemes of *ein Tick* include the temporal adjectives *schnell* 'fast' (rank 2), *langsam* 'slow' (5) and *spät* 'late' (6), which allude to the ticking of a clock as the most likely source concept for the construction. *Eine Handvoll* combines with count nouns, especially those denoting human beings (*Leute* 'people' [rank 1], *Menschen* 'humans' [3], *Überlebende* 'survivors' [12]), and with mass nouns, in particular grained substances from the domains of food and agriculture (*Nüsse* 'nuts' [4], *Erde* 'soil' [5], *Reis* 'rice' [6]). The latter use, at least, can be related to the literal meaning of 'handful' as a measure of substance volume.

Some quantifier/degree-modifier constructions also display preferences in semantic prosody. *Ein Fünkchen* 'a spark (diminutive)', for example, predominantly quantifies abstract positive concepts, especially *Wahrheit* 'truth' (rank 1), *Hoffnung* 'hope' (2) and *Anstand* 'decency' (4). In comparison, *ein Quäntchen* 'a quantum (diminutive)' has a more mixed semantic prosody, combing both with *Wahrheit* 'truth' (rank 2) and *Humor* 'humour' (3), but also with *Ironie* 'irony' (8) and *Naivität* 'naivety' (12). At the same time, both *ein Fünkchen* and *ein Quäntchen* display a particularly strong connection to their top collexeme(s). *Ein Fünkchen Wahrheit* 'truth' and *ein Fünkchen Hoffnung* 'hope' occur 890 and 679 times, respectively, while *Verstand* 'reason' places a distant third. *Ein Quäntchen Glück* 'luck' occurs 955 times, while the second-ranked collexeme *Wahrheit* 'truth' is only attested 193 times. This suggests that the two constructions have developed specific semi-idiomatic extensions, highlighting the fact that the patterns, despite their overall productivity, display quite tightly constrained functional profiles.

In sum, many collexemes of the more recent quantifier/degree-modifier constructions are indicative of the concrete meanings of their lexical source concepts. These constructions hence display strong *persistence* (Hopper 1991), or, in fact, they have retained limited degrees of productivity and grammaticalisation in general. This is expected not only based on their age, but also if their purpose is to serve as conceptually more vivid alternatives to the highly bleached *ein bisschen* and *ein wenig* in situations of pragmatic emphasis.

4.2.3 Network analysis of the constructional family

The third part of our analysis extends the view beyond the individual quantifier/degree-modifier constructions and focuses on their relationships in a constructional micro-network. In particular,

we examine the extent to which the members of the constructional family overlap in their functional profiles, thus giving rise to a partially redundant network of extravagant patterns.

The network plot in Figure 1 (see Section 4.1 for an explanation of the method) illustrates how many of their top 100 collexemes the ten quantifier/degree-modifier constructions (i.e. the nine more recent ones + *ein bisschen*) share with each other. The closer the constructions are positioned to each other in the network, the more semantically similar they are. The overall visual impression of the diagram highlights two clusters in which several younger quantifier/degree-modifier constructions display a significant overlap among their collexemes. The first cluster covers the right-hand side of the network, which features five rather densely interconnected constructions: *eine Idee* 'an idea', *eine Spur* 'a trace', *ein Zacken* 'a spike', *ein Tick* 'a tick' and *ein Tacken* 'a spike [low German]'. The other cluster consists of the two constructions in the upper left of the diagram: *ein Fünkchen* 'a spark' and *ein Quäntchen* 'a quantum'. These patterns share a considerable number of collexemes with each other, but are less strongly connected to the rest of the network.
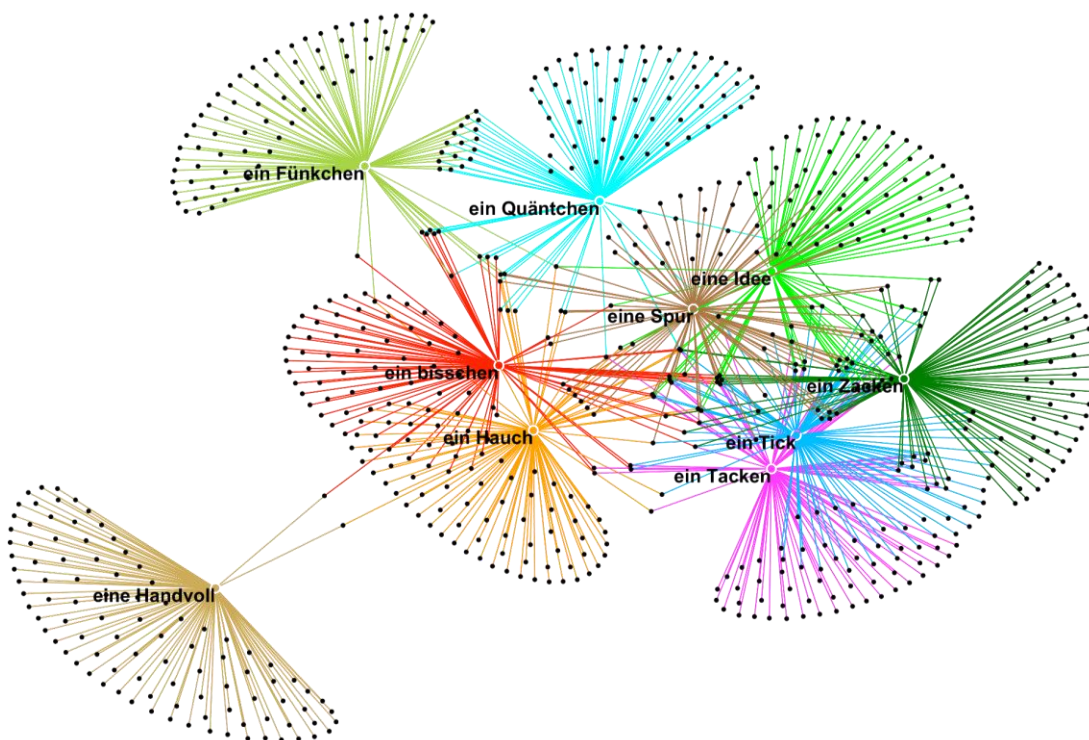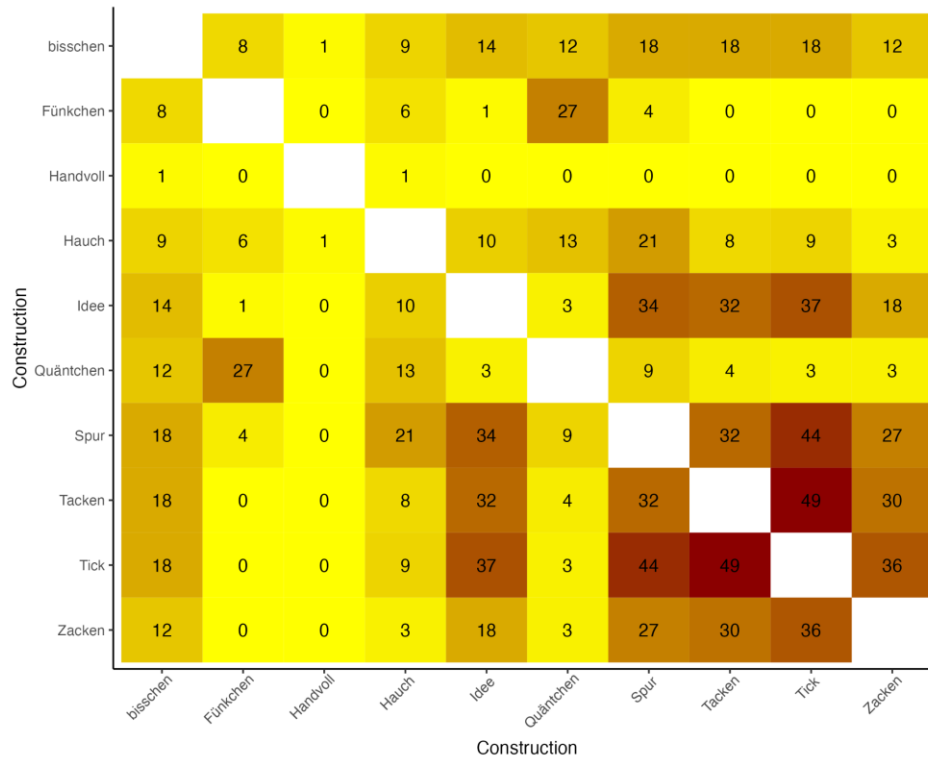

Figure 1. Network of German quantifier/degree-modifier constructions, based on the top 100 collexemes of each modifier.

As far as the remaining constructions are concerned, *eine Handvoll* 'a handful' is only loosely connected to the rest of the network, sharing merely a few of its collexemes with the other constructions. *Ein Hauch* 'a breeze', meanwhile, is linked more flexibly to the other constructions.

In line with the fact that the construction combines with both nouns and adjectives, it shares collexemes with several members of the above clusters, including *ein Quäntchen* 'a quantum' but also *eine Spur* 'a trace' and *ein Tick* 'a tick'. Finally, the prototype *ein bisschen* 'a bit', even more so than *ein Hauch*, displays fairly even degrees of overlap with all of the other patterns. As a result, it takes the position of a central "hub" in Figure 1.

To confirm the visual impressions of the network diagram, we can compute exact counts of the number of collexemes that are shared by the quantifier/degree-modifier constructions. This is represented with a heatmap in Figure 2, which uses a colour scheme to indicate how many of their top 100 collexemes the constructions on the x-axis and y-axis share with each other. The heatmap supports our conclusions above: for example, *eine Idee*, *eine Spur*, *ein Tacken*, *ein Tick* and *ein Zacken* overlap in many of their most strongly attracted collexemes (between 18 and 49 out of 100), thus forming a dark-coloured cluster in the lower right corner of the diagram. In contrast, *ein bisschen* shares relatively even numbers of collexemes with all of the newer quantifier/degree-modifier constructions (between 8 and 18), with the exception of *eine Handvoll*, which remains isolated from the rest of the network.[5]

Construction	bisschen	Fünkchen	Handvoll	Hauch	Idee	Quäntchen	Spur	Tacken	Tick	Zacken
bisschen		8	1	9	14	12	18	18	18	12
Fünkchen	8		0	6	1	27	4	0	0	0
Handvoll	1	0		1	0	0	0	0	0	0
Hauch	9	6	1		10	13	21	8	9	3
Idee	14	1	0	10		3	34	32	37	18
Quäntchen	12	27	0	13	3		9	4	3	3
Spur	18	4	0	21	34	9		32	44	27
Tacken	18	0	0	8	32	4	32		49	30
Tick	18	0	0	9	37	3	44	49		36
Zacken	12	0	0	3	18	3	27	30	36	

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[5] Interestingly, *Tacken* and *Zacken* share fewer collexemes with each other than one might perhaps expect given their formal similarity. One explanation for this might be that they tend to combine with relatively infrequent, often complex adjectives like *feuchtigkeitsspendend* 'moisturising' or *superwissenschaftlich* 'super-scientific'.

Figure 2: Number of top 100 collexemes that each of the constructions displayed on the y-axis shares with each of the constructions displayed on the x-axis (the darker the colour, the higher the relative proportion of collexeme overlap).

In this section, we have pursued a novel (yet simple) network approach to early grammaticalisation. Compared to earlier approaches mostly focusing on single constructions, our multi-constructional analysis is more revealing of semantic redundancies, which allow us to infer that the motivations for innovation are probably not so much semantic but stylistic in nature.

4.3 Discussion

The results of our analysis support the view that extravagance has affected the recent development of German quantifier/degree-modifier constructions. Extravagance appears to motivate the current use of the younger members of this constructional family, and since they have gained ground only during the last century, extravagance is likely to have played a role in their emergence as well. As such, our findings can be seen as tentative counter-evidence to the generalising claim that primary grammaticalisation is always triggered by the unintended reinterpretation of non-salient variation (e.g. Traugott 2017, Croft 2010). They provide some new corpus-based support for Haspelmath's (1999, 2000) extravagance-driven "periphrasis-first" account of early grammaticalisation.

A first result of our corpus study is that the younger members of the quantifier/degree-modifier family combine with a considerable number of collexemes that can be regarded as extravagant. These collexemes tend to be emotionally loaded (e.g. 'dramatics'), encode otherwise "extraordinary" concepts ('exoticism'), be associated with marked registers ('brain goo'), or instantiate complex morphological patterns ('community-college-creative'). This suggests that speakers may prefer the newer quantifier/degree-modifier constructions over the high-frequency prototype *ein bisschen* 'a bit' when they are emotionally more involved in the situation and/or when they want to attract attention on a stylistic level. Second, our results indicate that the younger quantifier/degree-modifier constructions display relatively constrained functional profiles compared with *ein bisschen*. This is in line with the idea that the newer potentially extravagant constructions are restricted to certain contexts in which they can be used with special pragmatic effect. In particular, the constructions still show signs of persistence (Hopper 1991) of their lexical sources: i.e. they often quantify or modify concepts that belong to the same semantic domain as their source concepts (e.g. airborne substances in the case of *ein Hauch* 'a breeze'). This shows not only that the younger constructions have yet to proceed further along their grammaticalisation path, but also that they still retain some of the rich semantics of their lexical sources. As a result, when these constructions are used with collexemes that lie outside their immediate source domain (e.g. *ein Hauch Nostalgie* 'a breeze of nostalgia'), they arguably give rise to more vivid and extravagant descriptions than can be achieved with the semantically bleached prototype *ein bisschen*. Third, our network analysis illustrates that the newer quantifier/degree-modifier constructions display considerable functional overlap with each other and cluster around similar

semantic niches. This supports the view that these constructions did not emerge to fill functional gaps in the networks, but that they instead originated as vivid alternatives in a functional domain that was, arguably, already "saturated" by well-established prototypes like *ein bisschen* and *ein wenig*.

On a broader level, our case study has several implications for the discussion points about the role of extravagance in grammaticalisation raised in Section 3. First, our findings illustrate the argument made there that cases of grammaticalisation may differ in the extent to which they involve extravagance as a motivating factor for diachronic change. In particular, we suggested that some grammatical domains may be rhetorically more "competitive" than others, thus provoking speakers' continuous creation of innovative expressions that stand beside the already existing patterns. The domain of quantification/degree modification may well be one of these competitive domains, given that the concepts denoted by the quantifier/degree-modifier constructions under discussion are inherently deviant from a norm in the sense of being located below a certain baseline on a semantic scale. This creates the communicative need of emphasising this deviance in creative ways (cf. also Levinson's [2000: 38] famous M[anner]-heuristic: "What's said in an abnormal way isn't normal"). Given that regular use entails conventionalisation and, as such, a certain degree of "normalisation", innovative quantifier/degree-modifier constructions threaten to "wear off" rather quickly once they are used with sufficient frequency, which leads to a higher demand for new coinages and as such to a higher degree of competition. Previous studies (e.g. Ito & Tagliamonte 2003, Brems 2011) have observed high rates of renewal and recycling especially for intensifying quantifiers and degree modifiers, i.e. expressions such as *heaps of*, *a hell of a*, *so*, *really* and *totally* in English. Inflationary use deprives these intensifiers of their pragmatic value. Conceivably, the high rhetorical competitiveness in the domain of intensifying quantification and degree modification partially extends to related downtoning quantifiers and degree modifiers like those in our case study.

A second aspect we discussed in Section 3 is that the role of extravagance in diachronic change may vary depending on where a phenomenon is situated along the cline between grammaticalisation and lexicalisation. While the German quantifier/degree-modifier constructions investigated here fall under the scope of grammaticalisation, they exhibit shades of what is traditionally classified as lexicalisation. Specifically, the borderline status of the constructions under scrutiny becomes apparent when considering the following factors. As typical of grammaticalisation phenomena, the development of the constructions generally follows a crosslinguistically attested path: pre-partitive > partitive > quantifier > degree modifier (cf. Traugott 2008, De Clerck & Colleman 2013, Neels & Hartmann 2022). As degree words, these constructions fulfil procedural functions, with increasingly abstract, scalar meanings in particular. From a construction grammar point of view, their nature is best captured as partially schematic constructions with productive slots. Lexicalising constructions, on the other hand, are typically fully/largely substantive constructions with low productivity and referential functions (cf. Traugott & Trousdale 2013). Still, the German quantifier/degree-modifier constructions pass some tests that

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Boye & Harder (2012), for instance, point out to be indicative of lexical status as opposed to grammatical status. They partially meet criteria of focalisability and addressability (cf. Traugott 2017: 105f.); and even the most grammaticalised modifiers of this constructional family are still perfectly capable of serving as full utterances in dialogic discourse, as in Example (3).

(3)   "Fühlst du dich irgendwie besser?" "Ein bisschen. [...]" (DECOW)
        "'Do you feel somewhat better?' "A bit.'"

Given the theoretical and empirical observations made in this study, it seems reasonable that, in the emergence of new grammatical constructions, symptoms of lexical status increase the likelihood of innovation being driven by conscious extravagant efforts.

A third issue we addressed in Section 3 is whether and how extravagance can be operationalised in a corpus-based way. Our present approach differs in several respects from previous corpus studies (e.g., Petré 2016, 2017); as a result, it has its distinct advantages and limitations, some of which we want to address as a final step. First, we focused on a recent (and potentially still ongoing) case of grammaticalisation, in which our speaker intuitions might provide reasonable grounds for judging the (non-)extravagant nature of the collexemes. Analyses of contemporary changes like these may provide proof of concept for the role of extravagance in grammaticalisation, without requiring us to speculate about what pragmatic effects a historical development may have had on the speakers of its time. In return, this of course means that the method may not be directly transferable to earlier cases of grammaticalisation, in which the effects of extravagance may at best be gleaned from indirect contextual measures (see Section 3 for some discussion).

Second, we used the relatively simple and widely applied tools of collostructional analysis to operationalise the semantics of our constructions. This approach was successful in so far as we found evidence not only of the extravagant collexemes that the younger quantifier/degree-modifier constructions combine with, but also of the semantic niches in which they primarily occur. On the other hand, our study illustrates that quantitative data about frequencies and collocational preferences do not, in themselves, point to the extravagant nature of constructions; instead, characteristics of the collexemes must still be interpreted in a qualitative, and ultimately subjective, fashion. Future studies could examine whether other methods, such as semantic vector space analysis (e.g. Perek 2016), can provide more objective, data-driven ways of characterising the semantics of the collexemes based on their collocational profiles. One possible application of these methods could be to calculate the dispersion or the average distance among the semantic vectors that represent the collexemes of each quantifier/degree-modifier construction, and check whether these measures support our claim that the younger members of the family have more constrained functional profiles than the prototype.

As a third feature of our approach, we complemented the analyses of the individual constructions with a simple network methodology, which allowed us to explore degrees of

functional overlap and differentiation within the constructional family. We believe that extending the scope beyond a single construction and focusing on the interactions between multiple constructions provides a promising avenue for future research on extravagance. Finally, another limitation that our approach shares with other corpus-based work in general is that it does not provide direct evidence of the effects that extravagant expressions have on speakers and hearers. As far as ongoing cases of grammaticalisation are concerned, corpus-based approaches could thus be complemented by sociolinguistic questionnaires (e.g. Ungerer & Hartmann 2020), which record speakers' explicit perceptions of extravagant language, or by psycholinguistic experiments (cf. Fine et al. 2013), which measure effects of surprisal via participants' implicit behavioural responses.

5   Conclusion

In this paper, we started out by observing that researchers disagree about the role of extravagance in grammaticalisation. We have suggested a number of ways in which the debate can be informed by a more nuanced view of the conditions under which speakers' desire to use noticeable and innovative expressions may drive language change. In Section 2, we argued that the discussion on extravagance can benefit from a clearer characterisation of the concept and its relation to the psycholinguistic notion of salience. In Section 3, we addressed five aspects that may help explain why researchers differ in their views on extravagance. Some of these differences may be reconciled by taking into account that extravagance can apply to some cases of grammaticalisation more than to others, and that researchers may be focusing on different elements of the process (e.g. actuation versus diffusion, and speaker versus hearer roles). Moreover, the section highlighted some open questions about whether and how extravagant effects can be identified, for example in historical corpora. In Section 4, we illustrated some of these theoretical points with a corpus-based case study of recently emerging German quantifier/degree-modifier constructions. Drawing on several explorative methods, we have shown that these innovative quantifier/degree-modifier constructions tend to combine with extravagant collexemes and that they display relatively constrained functional profiles which retain some of the vivid semantics of their lexical source (e.g. *eine Handvoll Menschen* 'a handful of people', which draws on a concrete source domain of 'small objects'). Moreover, our network analysis indicates that the newer constructions occupy overlapping semantic niches in a partially redundant constructional network, suggesting that their emergence was not driven by functional need alone, but also by speakers' desire to express familiar concepts in novel innovative ways.

Despite the limitations mentioned in Section 4, our case study sheds new light on a particularly interesting constructional family that can provide important clues about the factors that drive the grammaticalisation of new constructional variants. One intriguing aspect of the constructional family discussed here is that the quantifier/degree-modifier constructions in question seem to co-exist in a relation of both competition and mutual analogical support. On the one hand, they

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compete with each other, as witnessed by the relatively large number of shared collexemes. Possibly, this competition prevents some of the younger family members from attaining higher usage frequencies. On the other hand, they support each other by forming a densely interlinked constructional family that provides an easily extensible template for coining further [*ein* N(*chen*) X] constructions like *ein Fitzelchen* 'a shred (colloquial/diminutive)', *eine Portion* 'a portion', *ein Häppchen* 'a niblet', and many others. As more and more family members are added and used, the overarching higher-order schema [*ein* N(*chen*) X] gains in strength and productivity (see Neels & Hartmann 2022). This brings us all the way back to the maxims proposed by Keller and entitled "maxim of extravagance" and "maxim of conformity" by Haspelmath (1999). When coining new quantifier/degree-modifier constructions, language users, on the one hand, try to "stand out" by introducing slight modifications to a familiar pattern – on the other hand, however, they also conform to the widespread use of a semi-productive mid-level schema. Innovating new constructions and adding innovative uses to extant constructions are thus no creations ex nihilo but the outcome of affordances within the constructional network.

We hope that our theoretical considerations as well as our case study can contribute not only to the ongoing discussion on extravagance, but also to a reconciliation of different approaches to grammaticalisation as sketched by Cuyckens (2018). While some questions have to remain open, we hope to have shown that, in exploring the role of extravagance in grammaticalisation, it can prove insightful to go beyond individual patterns and to take families of constructions into account.

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